

ABSTRACT OF THE INVENTION

The invention provides a method and system for transmitting information from a computer to a server utilizing point-to-point protocol (PPP) in a mobile environment. The system enables a PPP session to be maintained between a user device and a PPP termination device while the user device is mobile. According to a particular embodiment of the invention, a Mobile IP address is assigned to customer premise equipment (CPE) device associated with a user device, e.g., a PC. The CPE includes a Mobile IP Mobile Node and L2TP access concentrator (LAC) functionality. The Mobile IP address is then registered with a Mobile IP Home Agent associated with the home network for the assigned Mobile IP address. The PC initiates a point-to-point protocol (PPP) session to the LAC within the CPE. The LAC initiates an L2TP session to an LNS. Between the LAC and the LNS there is a Mobile IP Network consisting of Mobile IP Foreign Agents at base stations and a Mobile IP Home Agent at the home network associated with the LNS. The communication between the LAC and LNS is sent via a Mobile IP tunnel between the Mobile IP Home Agent and the current Mobile IP Foreign Agent. The user device and associated CPE can move from one base station to another base station, and the underlying Mobile IP network infrastructure ensures that the L2TP packets being sent between the LAC and LNS are forwarded to each new location. The Mobile IP Mobile Node function in the CPE registers with the Mobile IP Home Agent each time it detects a new base station. By doing so, the Mobile IP Home Agent is informed of its new location where the Mobile IP Foreign Agent is to forward IP packets for the mobile computer.